

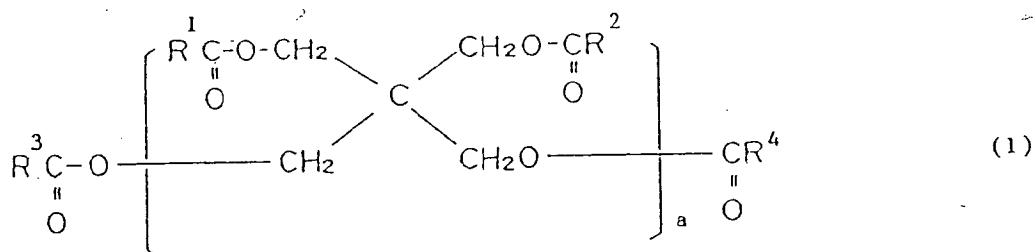
IN THE CLAIMS:

A complete listing of all the claims is now presented.

Claim 1. (Currently Amended).

A fluid composition for use in refrigerators, which consists of a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein $R^1 - R^4$ are identical with or different from each other and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 or 1 to 3; and

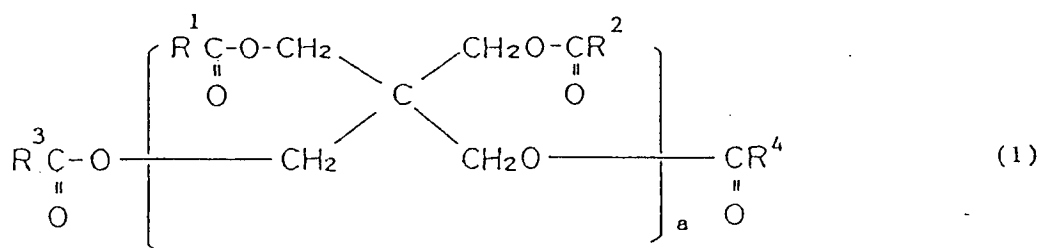
0.1-5% by weight based on the total amount of said refrigerator oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy compounds, and epoxidized fatty acid monoesters; and

said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.

Claim 2. (Currently Amended).

A fluid composition for use in refrigerators, which consists of a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein R¹ -R⁴ are identical with or different from each other and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 or 1 to 3;

at least one conventional oil selected from the group consisting of paraffinic mineral oils, naphthenic mineral oils, poly α -olefins and alkylbenzenes; and

0.1-5% by weight based on the total amount of said refrigerator oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy

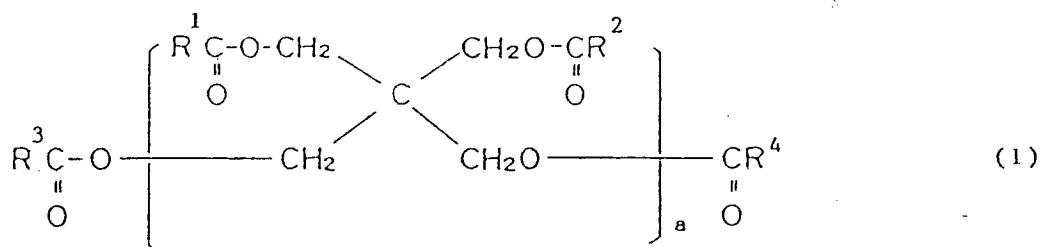
compounds, and epoxidized fatty acid monoesters; and

said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.

Claim 3. (Currently Amended).

A fluid composition for use in refrigerators, which consists of a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein R¹ -R⁴ are identical with or different from each other and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 or 1 to 3;

0.1-5% by weight based on the total amount, of said refrigerator oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy

compounds, and epoxidized fatty acid monoesters; and

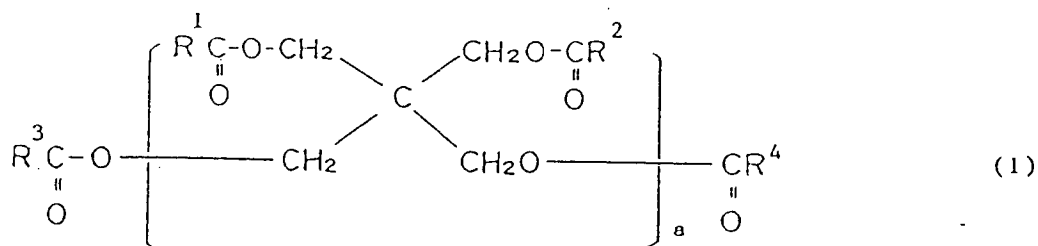
at least one additive selected from the group consisting of phenol antioxidants, amine antioxidants, wear resistant additives, extreme pressure agents, oiliness improvers, anti-foaming agents and metal inactivators; and

said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.

Claim 4. (Currently Amended).

A fluid composition for use in refrigerators, which consists of a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein R^1 - R^4 are identical with or different from each other and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 or 3; ~~1 to 3~~;

0.1-5% by weight based on the total amount of said refrigerator oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy compounds, and epoxidized fatty acid monoesters; and

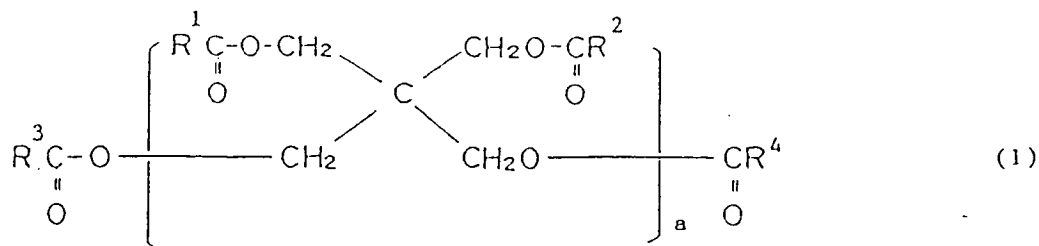
at least one phosphorus compound selected from the group consisting of phosphoric esters, acid phosphoric esters, amine salts of acid phosphoric esters, chlorinated phosphoric esters, and phosphorous esters; and

said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.

Claim 5. (Currently Amended).

A fluid composition for use in refrigerators, which consists of a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein R¹ -R⁴ are identical with or different from each other

and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 or ~~1~~ to 3; and

at least one conventional oil selected from the group consisting of paraffinic mineral oils, naphthenic mineral oils, poly α -olefins and alkylbenzenes;

0.1-5% by weight based on the total amount of said refrigerator oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy compounds, and epoxidized fatty acid monoesters; and

at least one additive selected from the group consisting of phenol antioxidants, amine antioxidants, wear resistant additives, extreme pressure agents, oiliness improvers, anti-foaming agents and metal inactivators; and

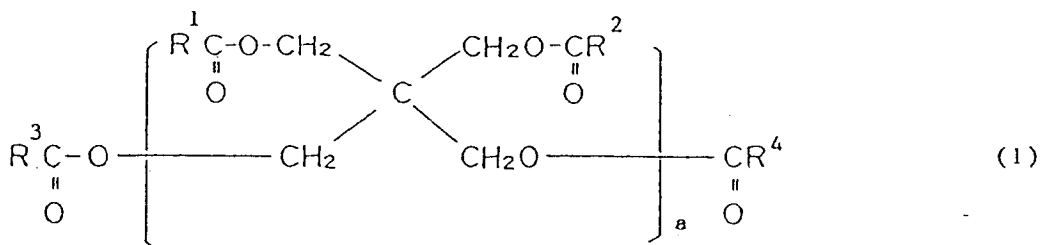
said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.

Claim 6. (Currently Amended).

A fluid composition for use in refrigerators, which consists of

a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein R^1 - R^4 are identical with or different from each other and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 ~~or 1 to 3~~;

at least one conventional oil selected from the group consisting of paraffinic mineral oils, naphthenic mineral oils, poly α -olefins and alkylbenzenes;

0.1-5% by weight based on the total amount of said refrigerator oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy compounds, and epoxidized fatty acid monoesters; and

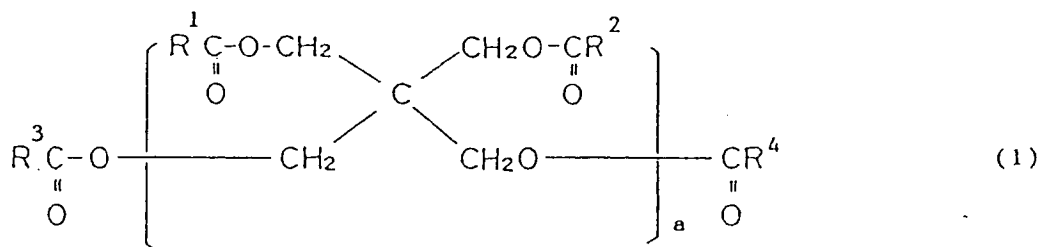
at least one phosphorus compound selected from the group consisting of phosphoric esters, acid phosphoric esters, amine salts of acid phosphoric esters, chlorinated phosphoric esters, and phosphorous esters; and

said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.

Claim 7. (Currently Amended).

A fluid composition for use in refrigerators, which consists of a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein R¹ -R⁴ are identical with or different from each other and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 or 1 to 3;

0.1-5% by weight based on the total amount of said refrigerator

oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy compounds, and epoxidized fatty acid monoesters;

at least one phosphorus compound selected from the group consisting of phosphoric esters, acid phosphoric esters, amine salts of acid phosphoric esters, chlorinated phosphoric esters, and phosphorous esters; and

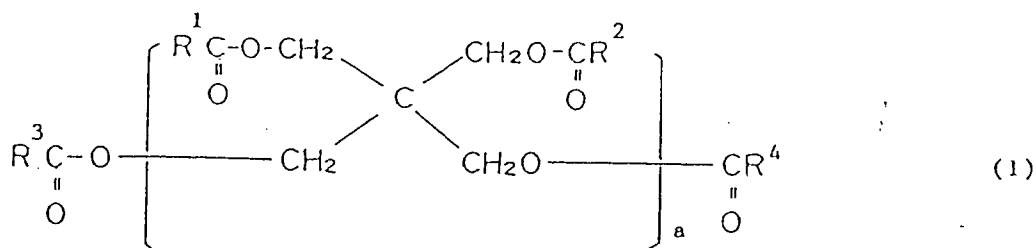
at least one additive selected from the group consisting of phenol antioxidants, amine antioxidants, wear resistant additives, extreme pressure agents, oiliness improvers, anti-foaming agents and metal inactivators; and

said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.

Claim 8. (Currently Amended).

A fluid composition for use in refrigerators, which consists of a chlorine-free fluorocarbon refrigerant and a refrigerator oil, and said refrigerator oil consists of as a base oil:

a pentaerythritol ester of formula (1)



wherein R¹ -R⁴ are identical with or different from each other and are each a member selected from the group consisting of straight-chain alkyl groups having 3 to 11 carbon atoms, branched-chain alkyl groups having 3 to 15 carbon atoms and cycloalkyl groups having 6-12 carbon atoms and a is an integer of 2 or ~~1 to~~ 3;

at least one conventional oil selected from the group consisting of paraffinic mineral oils, naphthenic mineral oils, poly α -olefins and alkylbenzenes;

0.1-5% by weight based on the total amount of said refrigerator oil of at least one epoxy compound selected from the group consisting of phenylglycidyl ether epoxy compounds, alkylphenylglycidyl ether epoxy compounds, glycidyl ester epoxy compounds, and epoxidized fatty acid monoesters; and

at least one phosphorus compound selected from the group consisting of phosphoric esters, acid phosphoric esters, amine salts of acid phosphoric esters, chlorinated phosphoric esters, and

phosphorous esters; and

at least one additive selected from the group consisting of phenol antioxidants, amine antioxidants, wear resistant additives, extreme pressure agents, oiliness improvers, anti-foaming agents and metal inactivators; and

said base oil has a kinematic viscosity of 2 to 150 cSt at 100°C.